



IME-02-014

November 10, 2003

To: Commissioner for Patents
P.O.Box 1450
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572
28 Davis Avenue
Poughkeepsie, N.Y. 12603

Subject:

Serial No. 10/638,235 08/08/03

Chaoyong Li et al.

METHOD TO FORM COPPER SEED LAYER
FOR COPPER INTERCONNECT

Grp. Art Unit: _____

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation
In An Application.

The following Patents and/or Publications are submitted to
comply with the duty of disclosure under CFR 1.97-1.99 and
37 CFR 1.56. Copies of each document is included herewith.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being
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mail in an envelope addressed to: Commissioner for Patents,
P.O. Box 1450, Alexandria, VA 22313-1450, on November 21, 2003.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

 11/21/03

U.S. Patent Application Publication US 2002/0119657 A1 to Gandikota et al., "Method for Enhancing the Adhesion of Copper Deposited by Chemical Vapor Deposition," discloses a Cu process with a metal plasma CVD nucleation layer.

U.S. Patent Application Publication US 2002/0068449 A1 to Hashim et al., "Method of Depositing a Copper Seed Layer Which Promotes Improved Feature Surface Coverage," discloses a Cu seed layer process with a metal plasma CVD nucleation layer.

U.S. Patent 6,391,776 to Hashim et al., "Method of Depositing a Copper Seed Layer Which Promotes Improved Feature Surface Coverage," discloses a Cu seed layer process.

U.S. Patent 6,306,732 to Brown, "Method and Apparatus for Simultaneously Improving the Electromigration Reliability and Resistance of Damascene Vias Using a Controlled Diffusivity Barrier," discloses a Cu dual damascene process with a barrier layer.

Sincerely,



Stephen B. Ackerman,
Reg. No. 37761

10 | 638, 235

Chaoyang Li et al.

08/08/03

Group Art Unit

~~CONFIDENTIAL~~

DATE

NAME _____

CLASS

SUBCLASS

PLUMB DATE
IF APPROPRIATE

6391776 5/21/02 Hashim et al.

438

687

1/5/01

630673210/23/01 Brown

438

468

10/9/98

DOCUMENT NUMBER

DATE _____

COUNTRY

CLASS

SUBCLASS

Translation

YES

NO

DANGER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.